XXXIV.—An account of the Birds met with during a two months' shooting trip in Northern Rhodesia. By Colonel Stephenson R. Clarke, C.B., M.B.O.U.

## (Plate VII.)

In the following pages I endeavour to give a short and, I fear, a superficial account of the birds observed while making a two months' shooting trip during August and September 1920, in north-western Rhodesia. I had meant to have collected birdskins more seriously, but I met with two unexpected mischances; in the first place, it was not found possible to secure the services of a trained bird-skinner, and, in addition, I injured my right arm the second day out from Monze, and was unable to use my shot-gun for a month after.

My son Edmund accompanied me, and we engaged as guide and hunter Mr. F. Cooper, of Mazabuka. On our way north my son and I broke our journey from Capetown, in the Free State, to shoot specimens of the Black Wildebeeste and Blesbok; during the few days spent there we motored from Winburg to the Hoopstad district and back by a different road, something over 100 miles each way. I felt a natural pleasure in renewing acquaintance with the birds of the Free State veld after twenty years' absence; the small number of Raptores seen (even allowing for the fact of it being the winter) seemed to show a great diminution in their numbers since then: Tinnunculus rupicoloides is still abundant, but the only other members of the group seen in these two long drives were two Secretary Birds and one Black-shouldered Kite, nor did we see any of the Francolins, I had certainly expected to see Francolinus gariepensis. On the other hand, White-quilled Knorhaan (Otis afroides), Namaqua Sandgrouse (Pteroclurus namaqua), Two-banded Courser (Rhinoptilus africanus), Burchell's Courser (Cursorius rufus), and the Kiewitjes (Stephanibyx coronata) were abundant, and I also saw several Blue Knorhaan (Otis cærulescens) in twos and threes, and, unless I was mistaken, many flocks of the

Black Fineh-Lark (*Pyrrhalanda australis*). I had met with each of these two last-named species on only one occasion, when collecting carefully during eight months in the Bloemfontein district. After this short expedition we again took the train for Rhodesia; soon after leaving Mafeking the railway-line enters very loose bush-veld, and though I believe we passed through one or two patches of open country in the night before reaching Monze, it was, as far as we saw, bush-veld, more or less dense, over practically the whole of the 700 miles of the eastern fringe of the Kalahari and the parts of western Rhodesia traversed in our railway journey to Monze, which is situated in long. 27° E., lat. 16° 50′ S.

We reached our destination on the 2nd of August about 10 in the morning, the frost of the night had disappeared, and we found our tents and two wagons waiting ready for us. We trekked at once and crossed a rolling open country with grazing grass, now dry from the winter's sunshine and drought, to the first water some seven miles west. Livingstone's Chat (Saxicola pileata livingstonii) and a Drongo (Dicrurus adsimilis) were seen on the plain, and near the water Doves and Swainson's Francolin (Pternistes swainsoni). The next morning we pushed on, the rolling grass-veld was left behind, and we entered a country of bush more or less dense interspersed with glades of open country, which, except on the flats by the Kafue River, were never of great extent. This country is, without being absolutely flat, very level, and dongas and streams few and far between. I was informed that the summer rainfall is very heavy, as much as 30 inches of rain falling in January and February; and, there being little surface drainage to carry off the water, the country during the summer months is waterlogged, and this probably accounts for the scarcity of Larks. Of these we only identified one species (Tephrocorys saturation); of Pipits one (Anthus sordidus nyassæ); also one Macronya, the beautiful M. wintoni, which so far as we observed was confined to the flats by the Kafue River. Bustards were also searce, and we only killed Otis melanogaster; of Francolins, F. swainsoni was the commonest, and frequented the gardens of the natives. I also saw a fair number of Pternistes cranchi, which appeared to keep to thick bush by water, and not to use the cultivated land; I was surprised to find the range of this species extended so far to the south-west of where I last saw it in the Nyando Valley, British East Africa. There were also a few true Francolins of one or perhaps two species found sparingly in the larger patches of thick bush and on the top of a kopje near the Nasenga River, but we did not obtain any specimens. No Ostrich is found in north-west Rhodesia.

Another family that was notably poorly represented for Africa was that of the true Shrikes. I did not see a single Lanius or Fiscus; on the other hand, in most places Urolestes was abundant, and Talacoma poliocephala often seen in small flocks. The latter were very wary and none were shot by us; but one day, while tracking an Eland, I saw a small bird struggling in the grass at the foot of a tree, and thought that it had noosed itself, while Cooper, our hunter, thought that a snake had caught it: we went to it and found two of the Helmet-Shrikes fighting. When we were quite near to them they disengaged themselves and flew to the branch of a tree close above our heads, a third bird joined them, then the original two resumed their fight, and locked together fell to the ground near my gunbearer, who killed them both with a tap from my walking-stick. The wildness mentioned above was not confined to the Helmet-Shrikes, all the small birds in the plains and bush were extraordinarily difficult to get near, and as the larger waders, goese and other birds along the river were more approachable than usual, I attribute it to the annual burning of the grass, which in August is just finishing. The heavy summer rainfall and the hot sun produce a very strong growth of grass that in places attains a height above the head of a man riding, though generally only reaching to the knee. The Mashakalumbwe, who inhabit this district, as soon as the grass is dry enough, burn it in strips and patches, and with spears and dogs kill all they can of the animals hiding in it. Since the arrival of white men in Rhodesia they have been able to cross the native curs with greyhounds, and their dogs nowadays are fast, and with their assistance they kill, besides many of the smaller buck, such as Oribi, the young of the largest antelopes, and probably do a great deal towards reducing the numbers of the big buck. There are still, however, plenty left for sport of most of the species of the latter that were originally found in the country—the Roan, which appears to like sour veld, and the Eland, which subsist largely by browsing, are the most generally distributed; while the Kudu, which desire thick covert to hide in, and the Sable, which seem to prefer light soil with short sweet grass and open park-like country shaded by large trees, are much more locally distributed. Our camps until we crossed the Kafue were generally pitched by a pan of water near to spots where there was a chance of finding one or both of these two antelopes.

These pans were sometimes deep enough to hold water permanently through the dry season, but generally they represented the last of the summer floods now drying up, often grass grew all over them, and until one waded in and parted the grass stems by one's hands, the water did not show: still, if care was taken to fill drinking-water vessels well away from the bank, the water was generally perfectly sweet and good, but twice in the Kafue Flats we got to bad water; the first time we attributed the cause to a peaty soil, and on the second occasion to the hundreds, perhaps thousands, of Spurwing Geese that came to this pan every evening. At the deeper pans there were the usual number of thirsty land-birds congregated to drink, especially Doves, and at the largest of them were several Darters and a pair of very tame Fishing Eagles (Haliaëtus rocifer), but the shallow pans were tenanted by wading- and water-birds in addition: generally there was a pair of Saddle-billed Storks (Ephippiorhynchus senegalensis), a flock of Open-bills, Crowned Cranes, and other wading birds; among them I was interested to see the Common Sandpiper, and obtained a specimen on the 15th of August. A fortnight later, on the banks of the Kafue River, I saw Greenshanks. I am quite sure that the

Sandpipers were on their return migration. I have always previously seen this species in Africa on the banks of rapid rivers similar to its breeding-haunts at home, but these birds were by stagnant pools and doubtless merely breaking their journey.

Among the remarkable features of the country are the anthills, their numbers are extraordinary, and their size at times prodigious; they are reported to be largest on good soil, and sometimes are nearly as big as wheat stacks. In some parts of the open bush all the trees and shrubs grow on anthills, the ground between being covered with grass or at times sour and bare; the size of some of the trees growing on the anthills indicates that the latter when very large are of immense age. It is possible that the heavy summer rainfall is the cause of the bushes growing only on the anthills in these spots, or it may be that animals do not destroy the seedlings on them; if it were not for their presence much more of the country apparently would be open grass plains, therefore the anthills would seem to have a very important effect on the distribution of the birds. The usual shape of these great anthills in the bush was similar to the small ones at home, but on the flats by the Kafue River, where they occurred, they were generally cone-shaped with sides so steep that they were difficult to climb.

We spent our first month, excepting two days when we crossed a part of the river flats, in the country described above; there were plenty of birds which, if often unobtainable, were of interest—the Grey Lourie (Schizorhis concolor) and two or three species of Hornbill were very conspicuous, as well as Coracias caudatus. I kept a sharp look-out for C. spatulatus, but we did not meet with it, and I only saw one specimen of Merops nubicoides, which was flying at a considerable height; a race of Melittophagus pusillus and M. bullockoides were the only other Bee-eaters I identified. Woodpeckers were not often met with: I saw and heard one making a dram-call on a dead tree like our Spotted Woodpeckers do at home, but the note was far more powerful; unluckily I was unable to determine the species, possibly it was Thripias

namaquus, of which we shot one specimen. There were a good many Vultures about our camps, and their numbers increased as we approached the Kafue.

My son killed a lioness one evening not far from our tents, and had her gralloched, intending to have her carried into camp to be skinned by the fire; she proved to be too heavy to carry, so she was skinned where she fell: that night two lions, probably looking for her, roared round camp till just before daylight. The next morning we rode out in different directions, but though out for four hours not a head of game could we see; we concluded the noise made by the lions had shifted the bucks. my way back to camp I thought that I would visit the carcase of the lioness to see if anything had been to it; both the carcase and the gralloch lay untouched, and in the grass around them and perched on trees above were some forty vultures, apparently Pseudogyps africanus. I offer no comment as to whether vultures recognize lion's flesh, but I am sure that if the body (to say nothing of the entrails) had been that of a fair-sized buck, the party I saw would have started to eat it at once, and that all would have been finished in twenty minutes. Before this episode I had seen three careases of lions left untouched by vultures though they had been killed two or three days previously, but at that time in that country (the Loietai plains, B. E. A.) vultures were not so plentiful as they were on the Kafue, and the herds of buck were far more numerous.

Besides the Fishing Eagles the Bateleur was common, and a specimen or two with apparently a light grey back were seen but not obtained. Two or three times eagles were seen to strike at birds: I saw, I believe, a Circaëtus make a stoop at a Pternistes standing on a bare patch of ground; the latter escaped by springing into the air at the last moment. I have seen Ptarmigan in Scotland evade the Golden Eagle in the same way. A Darter attacked by a Fishing Eagle tumbled headlong into the water; and a Marsh-Owl (Asio capensis) that I had marked down and was dismounting to shoot was swooped at by a small dark eagle—the owl mounted

in a narrow spiral, and a splendid flight ensued; a second eagle joined the chase, and the three birds circled upwards till all were lost to view, and I can give no idea as to the result, but the powers of flight of the owl surprised me.

Two specimens of Scops capensis were secured with one shot while seated side by side in a "German-sausage" tree, at the crimson flowers of which numbers of Cinuyris gutturalis in full plumage were feeding; one Bubo verreauxi was obtained. I saw one morning a small blue-grey Falcon chasing a little bird, which it pursued like our Merlin, and it seemed to be at least as quick on the wing. The next day my son brought to me a Dickinson's Kestrel (Dissodectes dickinsoni), which he shot when coming to drink at a pan; I believe this was the species I had seen the day previously, and I would humbly suggest that this bird, with its powerful legs and claws, should not be accounted a Kestrel. In some places Guinea Fowl (Numida mitrata) were abundant in goodsized flocks, their habits similar to other species of their genus, but their flesh was below the usual excellent quality of their race.

Just before reaching the Kafue River we crossed a low ridge of sandy soil. The Mashakalumbwe like such sites for their villages, and this was thickly populated, no bush had been left, but here and there a few great trees; in the branches of one which bore an olive-like fruit, were a large flock of green pigeons, one was shot and proved to be Vinago wakefieldii schalowi. On a tree further on my son saw a bird with a white head and breast; this was obtained, and was found to be the Barbet now named Lybius chaplini (Pl. VII. fig. 3). An hour later we reached the river, and from its bank enjoyed the spectacle of numberless birds feeding or flying to their roosting grounds. The ford was 150 yards wide, and the banks of the river, except where rocks raised grey masses above them, were lined with a narrow edging of green reeds, with sharp-pointed leaves; two or three islands of sand divided the river's surface, and birds were everywhere-Scissor-bills flew to and fro. Great White Egrets waded in the shallow water, the rocks carried black flocks of two species of Cormorant, Senegal and Spurwing Plovers and Greenshanks and Lily-Trotters thronged the sandy islands, a ceaseless stream of Spurwing Geese and Open-bills passed overhead, and the smooth surface of the river near the fringe of reeds was continually broken by the splashes of diving Kingfishers.

It was a delightful scene—an evening to be remembered. We shot a few herons and plovers, and then lay on the ground, the silence broken by the rippling of the clear river below us, the plop-plop of rising fish, and now and again the wild whistle of Fishing Eagles (Haliaëtus vocifer). We looked beyond the river at a fresh country; by the track we had come the slightly rolling veld had continued to the actual bank of the stream, but on the north side the river held in domination a wide tract of country; grassy flats intersected by lagoons and reed-beds extended beyond our range of sight, and promised a rich reward for several days' investigation. Unfortunately, the Lechwe and Puku we were seeking were not so abundant as we had expected, and after a couple of days spent among these delights of marsh-birds, we left for the thicker bush near the Nasenga River.

During these days we saw vast numbers of Spurwing Geese, and found them easy of approach. One party came to bathe in the river 50 yards away from our tents and paid a toll towards our food supply. I erawled up to another lot of about fifteen, and shot one with my Mauser; they were so slow at rising that I was able to pump up another cartridge and kill a second before it was on the wing. Other large birds were Crowned Cranes (Balearica regulorum), and another Crane which we thought to be the Stanley, but though we saw two or three pairs we were not able to secure a specimen; the Goliath Heron and the Saddle-billed Stork were also seen, and we killed one of each. There were a few flocks of Whydahs and Bishop-birds about the reeds, unfortunately the species were not identified; and I saw one Quail, but generally speaking small birds were not very abundant. Further on, beyond the country of lagoon and reed beds, we found large grassy flats which appeared to be

regularly flooded every rainy season, and here we saw the Red-cap Lark (*Tephrocorys saturatior*), *Macronyx wintoni*, and flocks of the Grey-rumped Swallow (*Hirundo griseopyga*), and occasionally the Pratincole (*Glareola pratincola*) flitted over them. We spent two nights by a shallow pan at the far edge of the flats; this was the resort every evening of a countless number of Spurwing Geese, their flocks arriving at sunset in a continuous stream.

Except where nature had cleared the ground, we found the bush near the Nasenga River somewhat denser than any we had seen before, the flat country ended, and there were a good many kopies and ridges flanking the river, the bush continuing over the sides and top of these. The Nasenga River itself is only a few feet across, but generally deeper than a man's height; here were a number of birds that we had not seen before. The first day we drove the banks of the river for bush-buck, and my first shot was at a huge Pel's Fishing Owl, which fell and hung in a thick mimosa tree on the far bank; the beaters on that side were all Mashakalumbwe, and when they saw the dead owl they thought it to be a leopard. Being ignorant of their language I could not explain matters to them, and so I had the painful experience of witnessing a Mauser bullet and two charges of buckshot poured into my owl, before any one would go near it.

Other interesting birds obtained during these beats were Turacus schalowi murungensis, Darters (Anlinga rufa), Green-backed Heron (Butorides atricapilla), Hah-de-dah (Hagedashia hagedash), Pternistes cranchi, a Stonechat, the skin of which was unfortunately spoilt, and Halcyon orientalis; the big Kingfisher (Ceryle maxima) was often seen but never shot at.

Having obtained specimens of Kudu and Crawshay's Waterbuck, we started on our homeward journey. It was now mid-September, and the weather was perceptibly warmer, though no rain had fallen since we started, the mimosas and other trees were getting green with their young leaves, here and there a tree showed among the rest scarlet

from the flowers of a creeper; others were delicate pink or orange-yellow with their own blossom, and a species of *Erythrina* carried horse-chestnut shaped panicles of crimson that had opened before its leaf-buds had burst. The only incident that I recollect of ornithological interest was passing some large flocks of, I believe, a third species of Crane; they were feeding on damp flats not far from the Kafue, and I failed to get within effective rifle range.

I have appended a list of the birdskins and birds preserved with formalin that we brought home with us, and which I have presented to the British Museum. This list was kindly prepared for me by Mr. Thomas Wells, to whom I return my grateful thanks.

Among the birds only one appears to be new. This is Lybius chaplini, named after Sir Drummond Chaplin, the Administrator of Southern Rhodesia. It is described in the Bull.B.O.C. (vol. xli. p. 50, Dec. 1920), and is figured (Plate VII.) together with what appear to be its two nearest allies, Lybius leucocephalus (Fil.), from the Egyptian Sudan and Uganda, and L. rubrifacies (Reichw.) also from Uganda.

List of Birdskins and Birds preserved in formalin, brought back from Northern Rhodesia and presented to the British Museum.

Pternistes swainsoni. cranchi. Numida coronata mitrata. Pterocles gutturalis saturatior. Vinago wakefieldi schalowi. Chalcopelia c. caffra. Rhynchops flavirostris. Ochthodromus asiaticus. Actophilus africanus. Glareola pratincola fulleborni. Rhinoptilus chalcopterus. Cursorius temminckii. Otis melanogaster. Balearica regulorum. Ardea goliath. Nycticorax nycticorax. Erythrocaus rufiventris.

Butorides atricapilla. Bubulcus ibis. Hagedashia hagedash. Anastomus lamelligerus. Ephippiorhyncus senegalensis. Plectropterus gambensis. Phalacrocorax africanus. Anhinga rufa. Neophron pileatus. Pseudogyps africanus. Melierax gabar. Astur badius polyzonoides. Helotarsus ecaudatus. Milvus migrans parasitus. Falco dickinsoni. Scops capensis. Scotopelia peli,

Bubo lacteus,
Asio capensis.
Halcyon orientalis.
Corythornis cyanostigma.
Bucorax cafer.
Melittophagus bullockoides.

,, pusillus cyanostictus.

Tachornis parva. Turacus schalowi marungensis. Schizorhis concolor. Centropus monachus.

", s. senegalensis.
Indicator indicator.
Lybius chaplini.
Melanobucco torquatus.
Pogoniulus chrysoconus rhodesiæ.
Caprimulgus fossei.
Thripias namaquus.

Hirundo semirufa.
,, s. monteiri.
,, griseopyga.
Grauculus pectoralis.
Pycnonotus tricolor micrus.
Crateropus hartlaubi.
Saxicola sp.
Campicola pileata.

Thamnolæa nigra. Cisticola n. natalensis.

" ruficapilla. " fulvifrons.

Euprinodes flavocincta. Sylviella rufescens.

Laniarius æthiopicus mossambicus.

Prionops poliocephala.

Batis puella.

Nilaus afer nigritemporalis.

Urolestes melanoleucus.

Melaniparus niger niger. Lagonosticta sengalla rendalli.

,, niveiguttata. Pyromelana xanthomelæna.

Vidua serena.

Estrilda angolensis.

Anaplectes rubriceps. Sitagra ocularia.

Serinus icterus.

Tephrocorys saturatior.
Anthus sordidus nyassæ.

Macronyx wintoni. Lamprocolius sycobius.

Dicrurus adsimilis.
Cinnyris æquatorialis.

" leucogaster.

XXXV.—Notes on some Birds from the Near East and from Tropical East Africa. By Colonel R. Meinertzhagen, D.S.O., F.Z.S., M.B.O.U.

## (Text-figure 4.)

The following notes have been compiled during the working out of my collections from Palestine, Syria, Egypt, and East Africa, and only those species are mentioned about which something of interest or something new has been noted.

I was in East Africa during the first two years of the war, and Mr. A. Turner continued to collect for me after I left the country, his main effort being directed towards migratory